



LabLink



**Director, Bureau of Laboratories
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Bureau Vision

The Bureau of Laboratories is a stronger, more diverse team within an integrated public health system. We utilize advanced technology and innovative leadership to provide comprehensive public health services in our dynamic global community.

Bureau Mission

We are dedicated to continuing leadership in providing quality laboratory science for healthier people and communities through partnerships, communication, and technical innovation.

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Editor: Teresa Miller

Laboratory Kit Order Tracking System—LKOTS

In 2019, the Bureau of Laboratories (BOL) implemented the Laboratory Kit Order Tracking System (LKOTS). LKOTS implementation was the culmination of a year-long project working with Kuntz, Leigh, and Associates (KL&A) aimed at improving the intake, processing, and tracking of supply requests from BOL submitters.

Just a few months after implementation, LKOTS was put to the ultimate test and surpassed all expectations.

When the COVID-19 pandemic began, collection supplies were nearly impossible to obtain. Federal partners began to procure supplies at the national level, shipping them to the states for dissemination. Because the BOL already had an established method for collection supplies dissemination, as well as working partnerships with many public health entities, it was decided that this same method would be used to disseminate these supplies. Through a coordinated effort of BOL logistical staff, BOL warehouse staff, volunteer staff, and staff from the Bureau of Emergency Preparedness, EMS, and Systems of Care, just shy of 18 million swabs and vials of transport media were disseminated. Because of the functionality LKOTS provided, in-demand supplies were able to be disseminated within a business day of receipt.

LKOTS is available for all BOL submitters to request collection supplies with the single caveat that supplies are only used for testing performed at the BOL.

The LKOTS URL is <https://milkots.michigan.gov/login>. Guides on how to create an account and how to place an order are available here:

<https://www.michigan.gov/mdhhs/doing-business/providers/labservices>

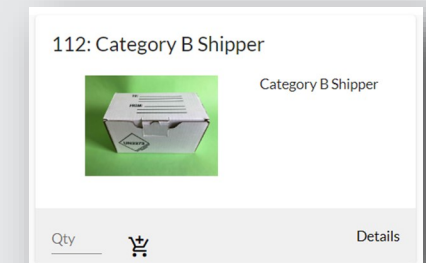
While not all collection supplies (i.e., swabs, transport media) are able to be provided free of charge, funds have been secured to allow the BOL to provide many sample collection items to its submitters. Packing and shipping supplies (i.e., boxes, biohazard bags) are currently able to be provided to BOL submitters for all testing.

LKOTS items, 1-52, are pre-assembled kits. These contain all the collection supplies as well as all the packing and shipping supplies that the BOL is funded to provide, listed by test, in a ready-to-go box.



LKOTS item numbers 100-150 are the components of those kits, available to request individually.

There are some exciting LKOTS enhancements on the horizon; implementation is expected in fall.



If you have questions about LKOTS, please reach out to MDHHSLab@michigan.gov



BOL Discontinues COVID-19 Antibody Assay

Beginning July 7, 2023, the Michigan Department of Health & Human Services Bureau of Laboratories (MDHHS/BOL) will discontinue testing for COVID-19 (SARS-CoV-2) antibodies due to low demand for testing and the inability to obtain testing reagents. However, the BOL continues to offer molecular testing and sequencing for COVID-19 virus.

For questions regarding this change please contact Virology and Immunology Section Manager, Dr. Diana Riner. email: RinerD@michigan.gov, Telephone: 517-335-8099.

Organizational Changes at the Bureau of Laboratories

Environmental health focuses on human illness and disabilities caused by non-infectious, non-occupational factors encompassing the natural and built environment (American Public Health Association, 2022). Environmental health includes programs such as biomonitoring, childhood lead poisoning prevention, food safety, and safe water to name a few (Center for Disease Control and Prevention, 2023). In Michigan, environmental health concerns are statewide and as of 2019 the following environmental sites and hazards were identified: 59 PFAS sites; 652 public water supplies reported lead and copper data above the action level exceedance; 284 vapor intrusion sites; and 66 superfund sites. These numbers continue to grow as additional sites triggering regulatory responses are identified.

Most of the testing for Michigan’s environmental health programs such as MI Lead Safe Program; Eat Safe Fish Program; PFAS in deer, fish, serum, and drinking water; harmful algal blooms in recreational and public water supplies; biomonitoring and human health studies are performed at the Bureau of Laboratories (BOL), Division of Chemistry and Toxicology (DCT), Clinical and Environmental Chemistry Sections, formally known as the Analytical Chemistry Section (ACS).

Prior to 2017, DCT was made up of two sections Analytical Chemistry and Newborn Screening with two testing units in each section and divisional staff of 40 employees. To better serve Michigan residents as identification of environmental contamination and hazard sites increased, the Analytical Chemistry Section was expanded from two to three units: Trace Metals, Environmental Organic Response and Clinical Organic Response units.

In 2022, the ACS received funding to expand testing capabilities and perform drinking water surveillance testing to support necessary public health responses. This expansion allowed ACS to separate into the Clinical and Environmental Chemistry Sections, with each section comprised of

an inorganic and organic unit.

Currently, the DCT has approximately 72 staff within three sections: Clinical Chemistry, Environmental Chemistry, and Newborn Screening that support the testing expansion capacity. Each Section’s capabilities are outlined in **Table 1**.

Table 1: Clinical and Environmental Chemistry Section Testing Capabilities

Environmental Chemistry Section	
Environmental Inorganic Unit	Environmental Organic Unit
Mercury in fish	Harmful algal blooms in recreational and drinking water
FERN* panel	Persistent Organic Pollutants in fish
Spices, teas, and supplements panel	FERN* panel
Lead Isotope	PFAS –tissue and agriculture
Clinical Chemistry Section	
Clinical Inorganic Unit	Clinical Organic Unit
LRN-C* whole blood and urine panel	LRN-C* serum panel and urine panel
Whole blood lead screening and confirmatory tests	PFAS –serum, plasma, dried blood spots, and water
Biomonitoring whole blood and urine panel	Persistent Organic Pollutants in serum
Arsenic and Mercury Speciation	Biomarkers in serum and whole blood

*LRN-C, Laboratory Response Network-Chemical

*FERN, Food Emergency Response Network

Organizational Changes at the Bureau of Laboratories *...continued from Page 4*

For more information regarding Environmental Inorganic Testing, please contact:

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For more information regarding Environmental Organic Testing, please contact:

Adam Bush	Unit Manager	BushA6@michigan.gov	517-335-9602
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For information regarding Environmental Inorganic or Organic Testing at the BOL, please contact:

Keri Fisher	Environmental Chemistry Section Manager	FisherK@michigan.gov	517-335-9489
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For more information regarding Clinical Inorganic Testing, please contact:

Sarah Lockwood-O’Brien	Unit Manager	LockwoodOBrienS@michigan.gov	517-335-0168
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For more information regarding Clinical Organic Testing, please contact:

Timothy Karrer	Unit Manager	KarrerT@michigan.gov	517-241-6364
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For more information regarding Clinical Inorganic or Organic Testing at the BOL, please contact:

Jessica Pruett	Clinical Chemistry Section Manager	PruettJ@michigan.gov	517-335-5433
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References:

American Public Health Association (2022). *Building an understanding of environmental health*.

<https://www.apha.org/topics-and-issues/environmental-health/understanding-environmental-health>

Center for Disease Control and Prevention (2023, June 12). *National Center for Environmental Health*. <https://www.cdc.gov/nceh/>

